

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

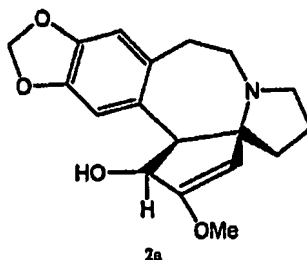
PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

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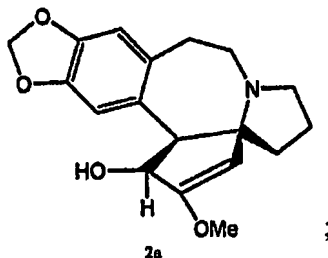
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION**

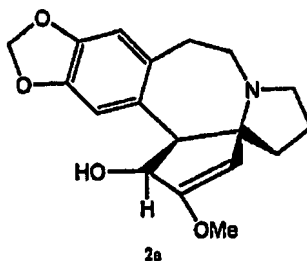
In column 5, lines 23-30, please replace the following structure:



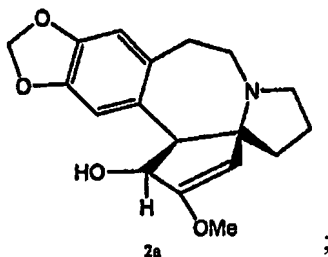
with



In column 5, lines 31-41, please replace the following structure:



with



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INVENTOR(S) : Jean-Pierre Robin et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

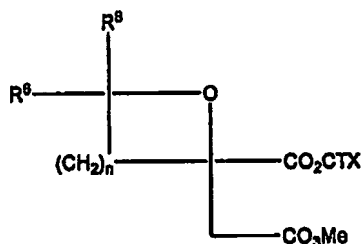
**SPECIFICATION (continued)**

In column 6, line 38, please delete the word "is";

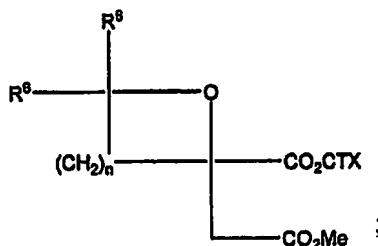
In column 7, line 57, please delete the word "is";

In column 8, line 12, please replace "xacycloalkane" with --oxacycloalkane--;

In column 12, lines 1-8, please replace the following structure:



with

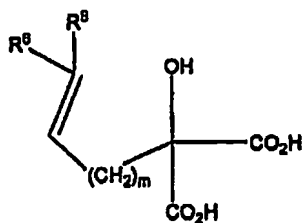


In column 18, line 40, please replace "31" with --3j--;

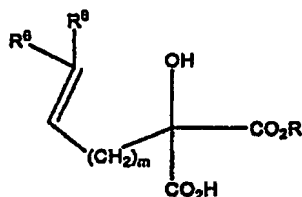
In column 19, line 20, please replace "cydic" with --cyclic--;

In column 19, line 44, please replace "31" with --3i--;

In column 20, lines 1-7, please replace the following structure:



with



3u

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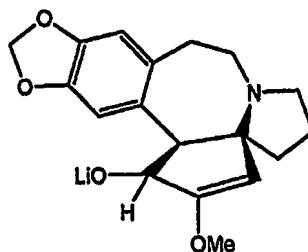
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

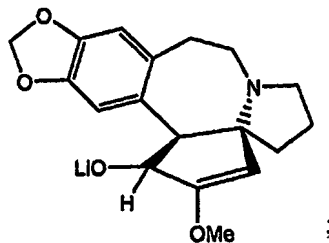
**SPECIFICATION (continued)**

In column 21, line 15, please replace "3q" with --3g--;

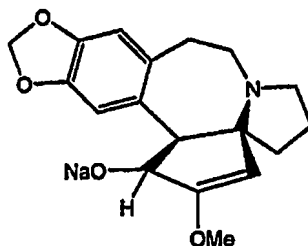
In column 29, lines 45-53, please replace the following structure:



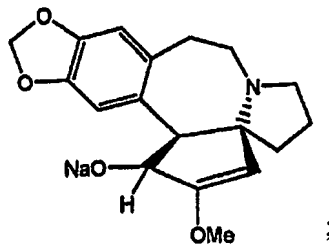
with



In column 29, lines 57-63, please replace the following structure:



with



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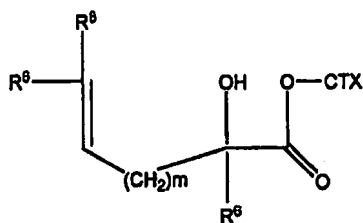
PATENT NO. : 6,831,180 B1  
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INVENTOR(S) : Jean-Pierre Robin et al.

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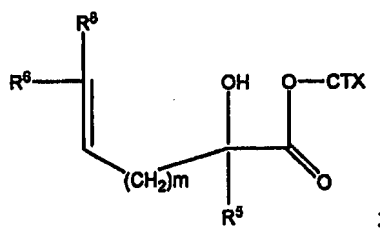
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

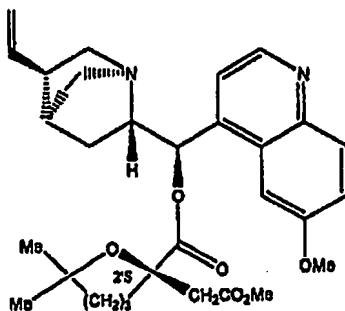
In column 30, lines 35-42, please replace the following structure:



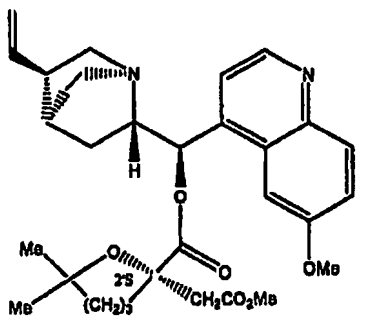
,with



In column 36, lines 50-61, please replace the following structure:



with



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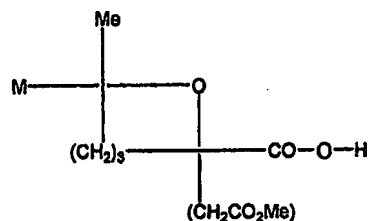
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

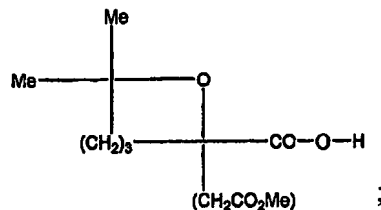
**SPECIFICATION (continued)**

In column 37, line 29, please replace "homoherringtonate" with  
--homoharringtonate--;

In column 40, lines 43-48, please replace the following structure:

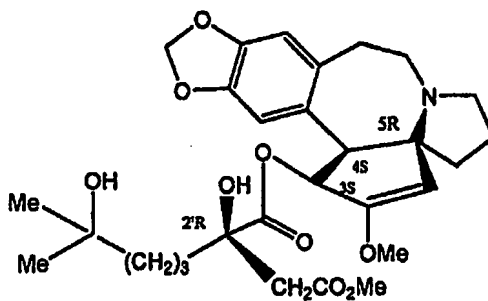


with

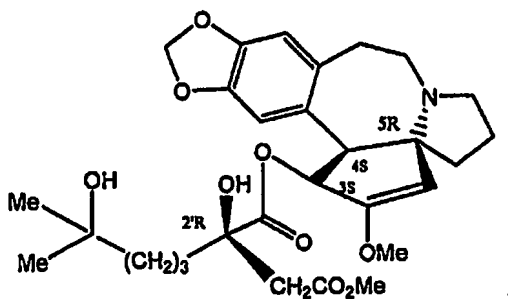


In column 43, line 38, please replace "O—CO—A" with --  $\Omega$ —CO—A --;

In column 45, lines 1-10, please replace the following structure:



with



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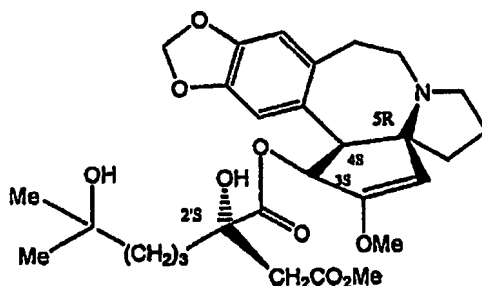
PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

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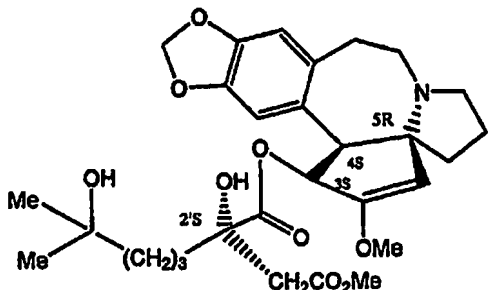
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

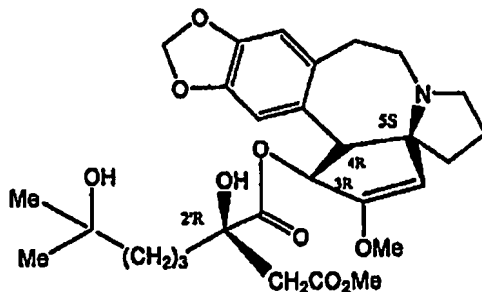
In column 45, lines 19-28, please replace the following structure:



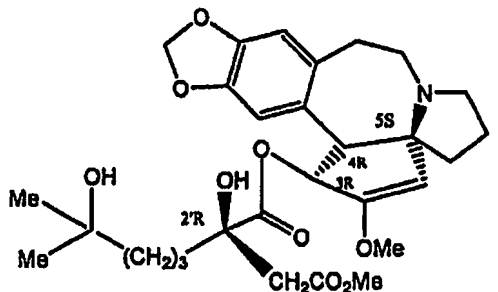
with



In column 45, lines 38-46, please replace the following structure:



with



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**SPECIFICATION (continued)**

In column 46, line 47, please replace "Harrinatonines:" with --Harringtonines--;

In column 46, line 60, please replace "in a position" with --in  $\alpha$  position--;

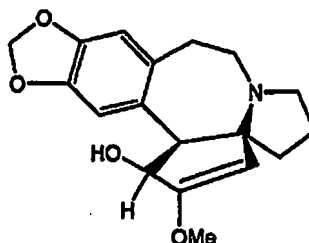
In column 54, line 43, please replace " $J_{4,3}=9.6$ , H4" with --  $J_{4,3}=9.6$ , H-4--;

In column 55, line 5, please replace "aarboxylate" with --carboxylate--;

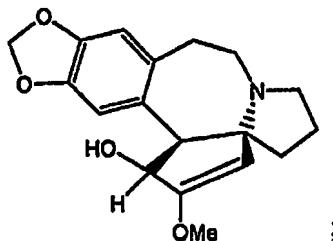
In column 56, line 2, please replace "silica (14-40 $\mu$ m)" with --silica (15-40 $\mu$ m)--;

In column 57, line 11, please replace "aarboxylate" with --carboxylate--;

In column 58, lines 5-12, please replace the following structure:



with



In column 58, line 45, please replace "on S trituration" with --on trituration--;

In column 62, line 21, please replace "1-dicyclohexylcarbodiimide" with --1,3-dicyclohexylcarbodiimide--;

In column 62, line 57, please replace "buffer J acetonitrile" with --buffer / acetonitrile--;

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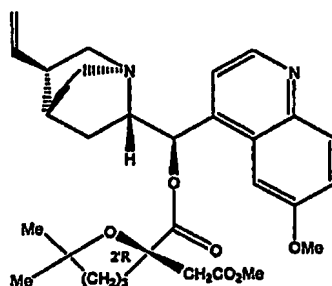
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INVENTOR(S) : Jean-Pierre Robin et al.

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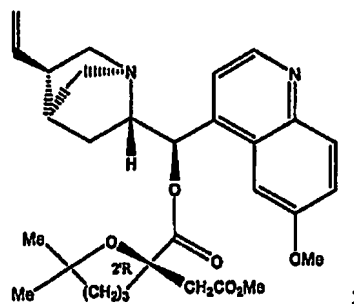
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

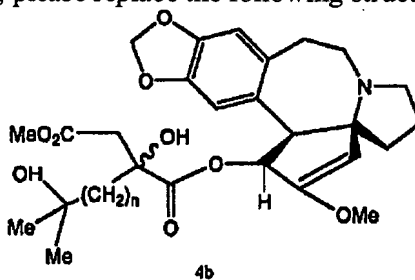
In column 63, lines 4-5, please replace the following structure:



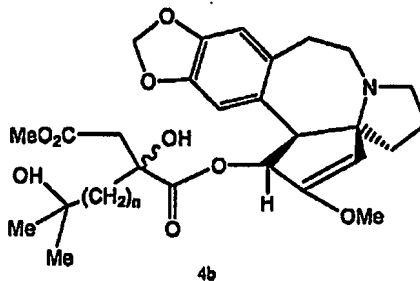
with



In column 63, lines 27-38, please replace the following structure:



with





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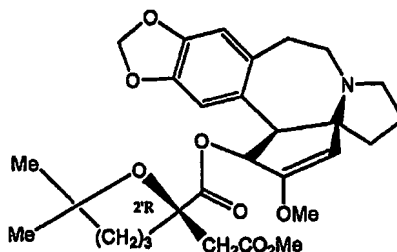
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INVENTOR(S) : Jean-Pierre Robin et al.

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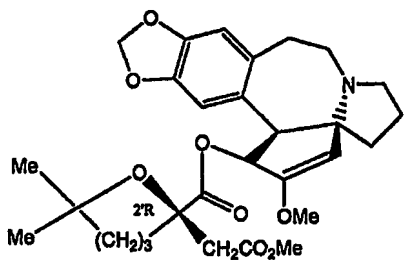
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

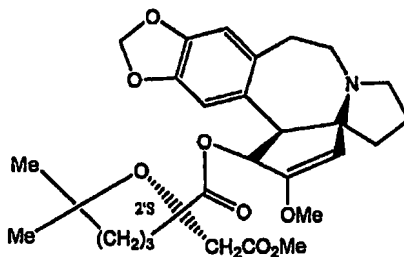
In column 66, lines 6-15, please replace the following structure:



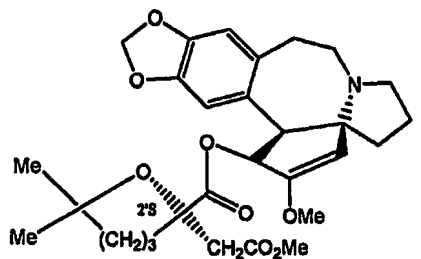
with



In column 66, lines 55-63, please replace the following structure:



with



UNITED STATES PATENT AND TRADEMARK OFFICE  
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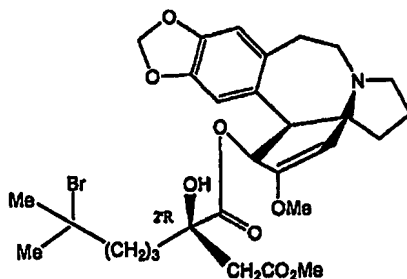
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INVENTOR(S) : Jean-Pierre Robin et al.

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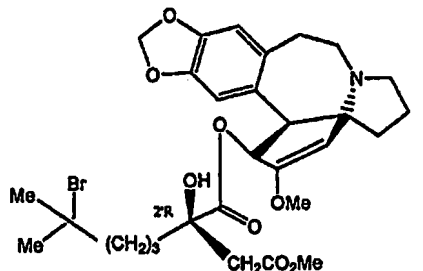
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

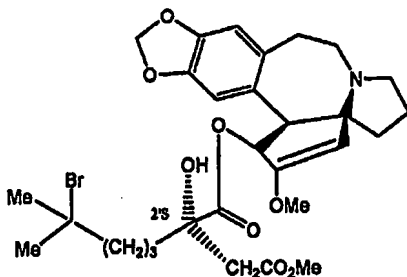
In column 67, lines 35-45, please replace the following structure:



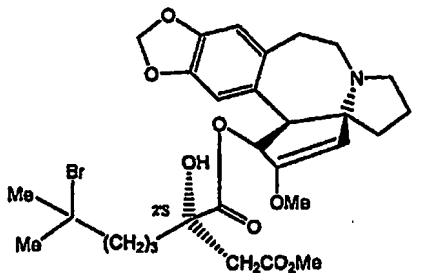
with



In column 68, lines 10-18, please replace the following structure:



with



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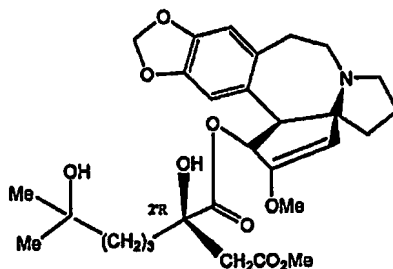
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DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

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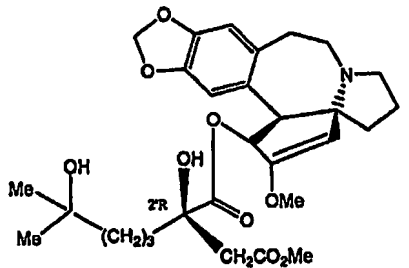
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

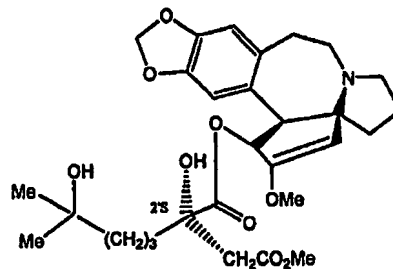
In column 68, lines 52-61, please replace the following structure:



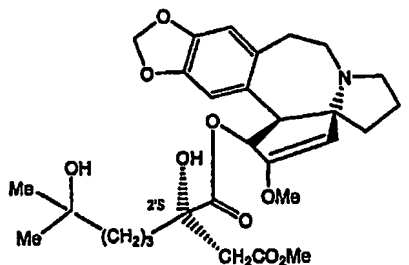
with



In column 69, lines 49-58, please replace the following structure:



with



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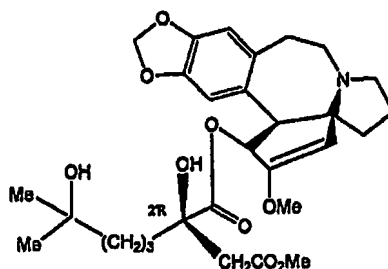
PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
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INVENTOR(S) : Jean-Pierre Robin et al.

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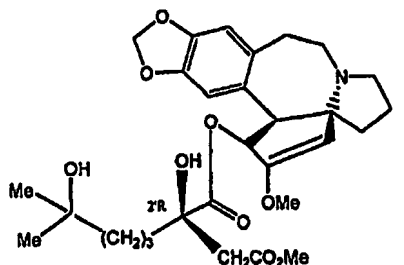
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

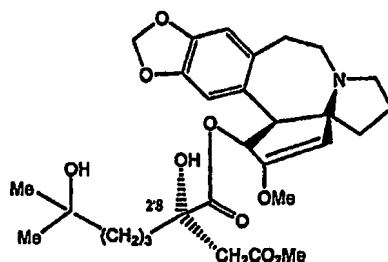
In column 71, lines 8-17, please replace the following structure for homoharringtonine:



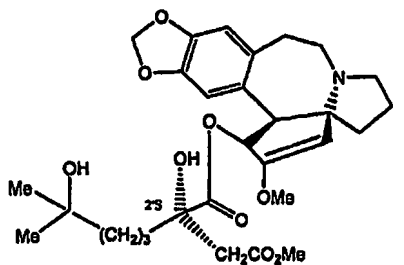
with



In column 71, lines 19-28, please replace the following structure for *epi*-homoharringtonine:



with



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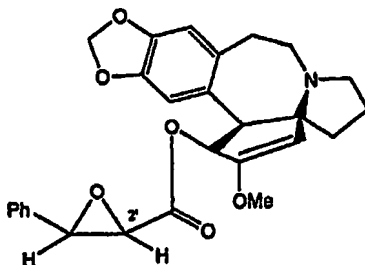
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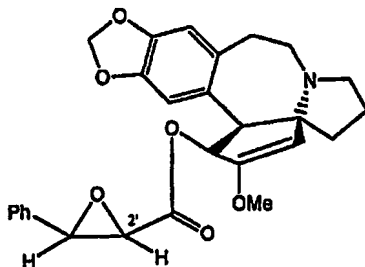
**SPECIFICATION (continued)**

In column 72, line 9, please replace "cehalotaxine" with --cephalotaxine--;

In column 72, lines 11-19, please replace the following structure:

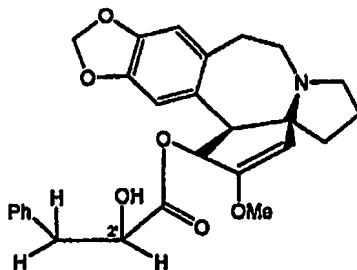


with

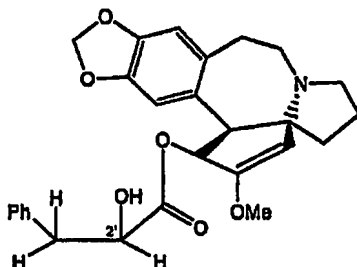


In column 72, line 52, please replace "V hydrogenolysis" with --Via hydrogenolysis--;

In column 72, lines 54-63, please replace the following structure:



with



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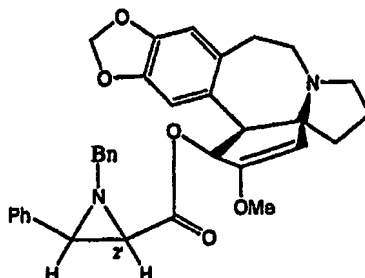
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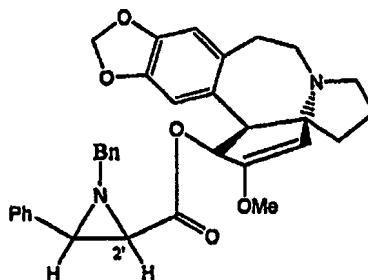
**SPECIFICATION (continued)**

In column 75, line 31, please replace "aziridine-carboxylate" with --aziridine-1-carboxylate--;

In column 75, lines 33-43, please replace the following structure:



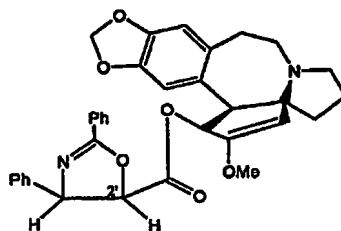
with



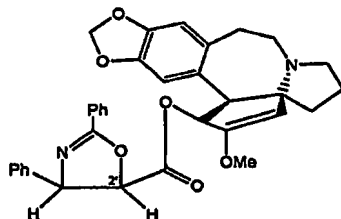
In column 75, line 66, please replace "6.63(1H, s, H-17);" with --6.63(1H, s, H-17\*);--;

In column 76, lines 1-2, please replace "3.20 (2H, 2d,  $J_{AB}$ =13.7,  $\underline{\text{CH}}\text{hd}2\text{Ph}$ );" with --3.20 (2H, 2d,  $J_{AB}$ =13.7,  $\underline{\text{CH}}_2\text{Ph}$ );--;

In column 76, lines 23-33, please replace the following structure:



with



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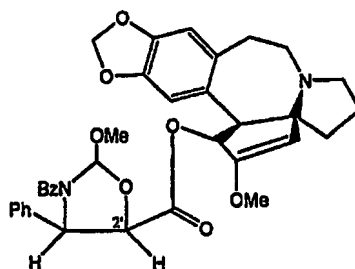
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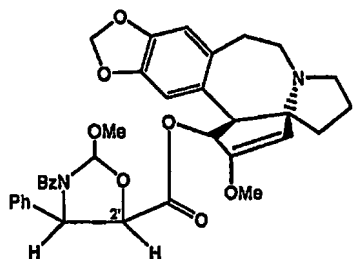
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

In column 77, lines 18-28, please replace the following structure:

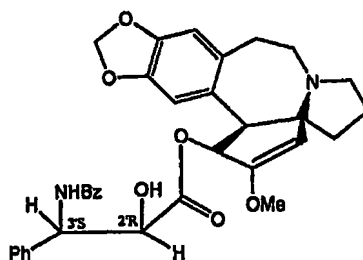


with

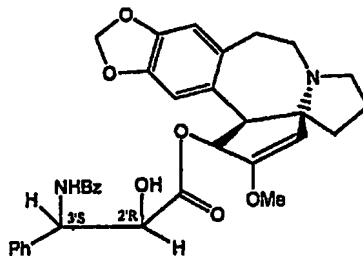


In column 77, line 57, please replace "6.56(1H, s, H-17');" with "--6.56(1H, s, H-17\*);--";

In column 78, lines 6-14, please replace the following structure:



with



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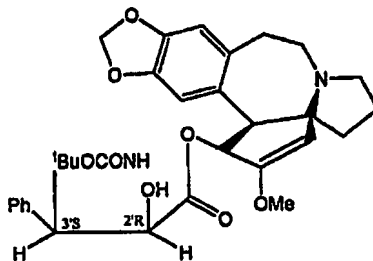
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

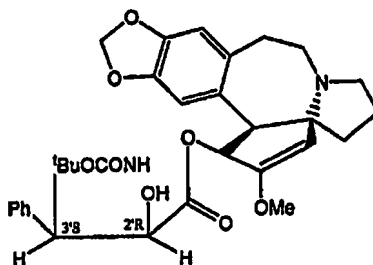
**SPECIFICATION (continued)**

In column 78, line 41, please replace "6.57(1H, s, H-14);" with --6.57(1H, s, H-14\*);--;

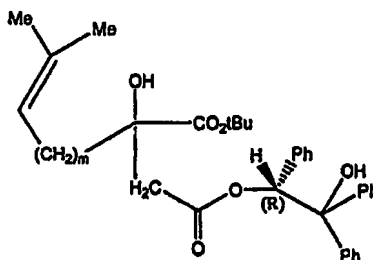
In column 79, lines 9-18, please replace the following structure:



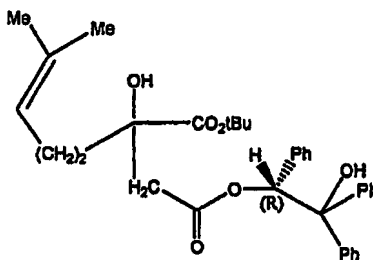
with



In column 84, lines 6-15, please replace the following structure:



with





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**CERTIFICATE OF CORRECTION**

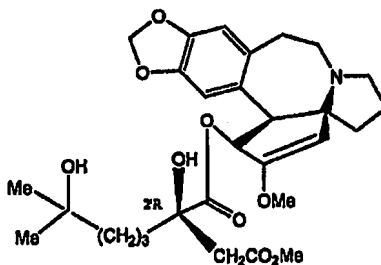
PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

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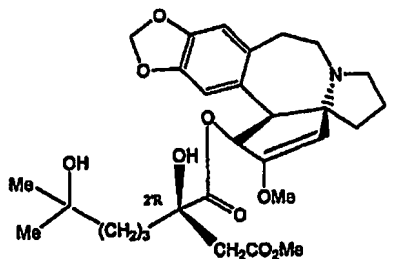
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

In column 86, lines 46-54, please replace the following structure:



with



In column 87, in the table DESCRIPTION AND DEFINITION OF HARRINGTONINES, Examples of cephalotaxines, under Demethylcephalotaxine, 2d, please replace " $R^4 = OH$ " with  $--R^3 = OH--$ ;

In column 87, in the table DESCRIPTION AND DEFINITION OF HARRINGTONINES, under Examples of cephalotaxines, please replace "11-Hydroxycephalotaxinone,  $2f = 2b + R^3 = OH$ " with  $--11-Hydroxycephalotaxinone, 2f = 2b + R^4 = OH--$ ;

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

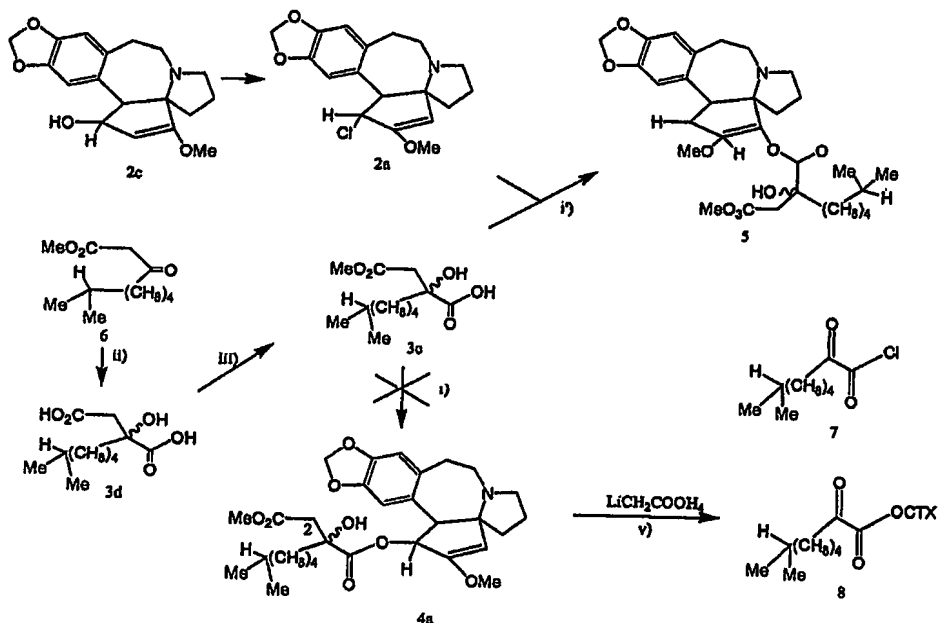
PATENT NO. : 6,831,180 B1  
 APPLICATION NO. : 09/270006  
 DATED : December 14, 2004  
 INVENTOR(S) : Jean-Pierre Robin et al.

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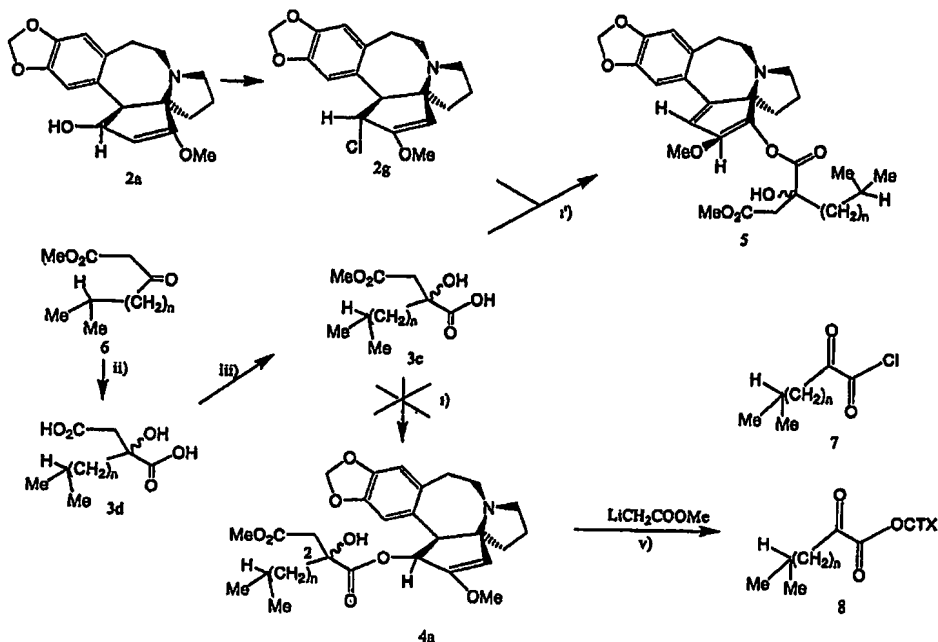
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**SPECIFICATION (continued)**

In columns 89-90, in the table DESCRIPTION AND DEFINITION OF HARRINGTONINES, please replace the following structures:



with



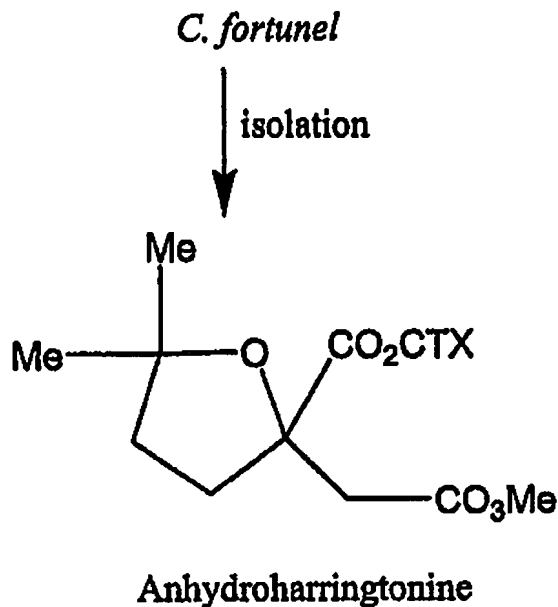
UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

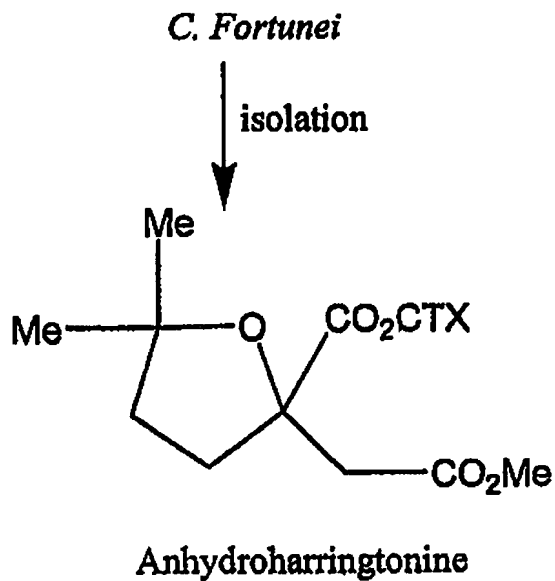
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 89, in the table ORIGIN OF THE ANHYDROHARRINGTONINES, please replace: (Page 37)



with



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,831,180 B1  
APPLICATION NO. : 09/270006  
DATED : December 14, 2004  
INVENTOR(S) : Jean-Pierre Robin et al.

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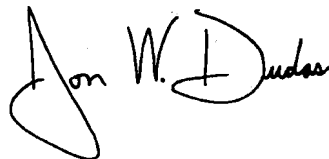
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**CLAIMS**

In column 91, line 11, please delete the word "between";  
In column 91, line 14, please replace " $(-\text{CH}_2\text{COOH}_3)$ " with  
--  $(-\text{CH}_2\text{COOCH}_3)$ --;  
In column 91, line 19, please replace " $(-\text{CH}_2\text{COOH}_3)$ " with  
--  $(-\text{CH}_2\text{COOCH}_3)$ --.

Signed and Sealed this

Twenty-fifth Day of September, 2007



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*